

**ABSTRACT**

[00078] An optical communication system is provided that has a network including a transmitter station that conveys data through a wireless pathway to a receiver station. An obstruction of the pathway is determined by measuring the attenuation of an optical beam arriving at or intending to arrive at a target receiver station and comparing the value with the attenuation of other optical beam(s) arriving at or intending to arrive at one or more reference receiving stations in the optical communication system. The values are interpreted to determine the nature of the blockage and various parameters in the optical data transmission system controlled according to the presence of a local blockage or global blockage. A further consideration in determining the type of blockage may be through measuring the backscattering of the optical beam. In addition, other aspects of the present invention relating to the storage and transfer of selected transaction data are described.